ABSTRACT

PROCESS AND APPARATUS FOR PERFORMING AN AUTOMATIC DISCOVERY OF THE TOPOLOGY AND DEVICES OF AN INTRANET NETWORK

A process and apparatus for automatically discovering the topology and components of an intranet network comprising at least one sub network to which are attached a set of devices complying with the TCP/IP protocol. The invention takes advantage of the existence of the ICMP layer existing in the TCP/IP layer for the purpose of determining the sub network of a given device. Once the sub network has been determined, as well as the subnet mask, the process determines the other sub networks which may co-exist within the Intranet. This is achieved by means of a computation of different sub network configurations, and for each configuration, the process successively generates and transmits ICMP requests to two different broadcast addresses, the answers of which being used for testing and validating the different configuration and the subnet masks.

20 Fig. 5

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